

Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz) GN Docket 17-183

The City of Mesa, Arizona is a license holder of 54 mission critical public safety microwave paths throughout the East valley (Phoenix metro area), with 11 of those paths licensed in the proposed bands of 5925-6425 MHz and 6425-7125 MHz. The City of Mesa is also the Administrative Manager of the TOPAZ Regional Wireless Cooperative (TRWC)¹.

The TRWC operates and maintains a 7/800 MHz APCO Project 25 (P25) Public Safety Land Mobile Radio System, and an analog simplex VHF system for use by firefighters in “Hazard Zones.” Both of these networks rely on point-to-point microwave radio paths for proper operation and clear communications with First Responders.

The Cities of Mesa and Apache Junction, the Towns of Gilbert, Rio Verde and Queen Creek, Superstition Fire & Medical, and the Fort McDowell Yavapai Nation have established the Topaz Regional Wireless Cooperative (TRWC). The TRWC Region covers over 320 square miles in the Southeast Phoenix/Mesa Standard Metropolitan Statistical Area and represents over 750,000 citizens. Within this area there are 263,917 households, 20,239 businesses and 175 community anchor institutions (schools, hospitals, clinics, etc.). The TRWC network itself connects 21 public safety agencies (Law Enforcement, Fire/Rescue, Emergency Medical, and Emergency Management), Mesa Community College, Mesa Public Schools and the City of Phoenix. The function of the TRWC, through the implementation of the TRWC Governance Process, is to jointly operate a regional radio system that is modern in its management, has equity in membership, and provides for support and future growth.

<http://www.topazrwc.org/Home.aspx>

The City of Mesa and the members of the TRWC embrace new technology, and realize it can bring capabilities we can only imagine. We recognize the wireless technologies being developed for the 3.7-24 GHz band may well be revolutionary for wide-area one-to-many communications, and may likewise be revolutionary in their effects on existing communications technologies, such as point-to-point microwave radio to weave radio networks together.

While we are excited about the possibilities of future technology, we also need to protect existing communications networks from harmful interference, especially from mobile sources. It is extremely difficult to track down sources of interference when they are intermittent and moving. As you have seen in the comments we filed regarding the mobile satellite service proposed in essentially the same frequency band by Higher Ground, LLC, we are unconvinced interference mitigation technologies are reliable enough to avoid interference that could have potentially catastrophic results to citizens and First Responders.

We request the FCC disallow the proposed flexible use of frequencies in the bands of 5925-6425 MHz and 6425-7125 MHz until independent laboratory and field trial testing can be performed. This testing must prove the cell carriers claim of zero interference to licensed frequencies in the bands of 5925-6425 MHz and 6425-7125 MHz. In addition, we recommend the Commission develop policies and procedures for the rapid investigation and resolution of interference claims.

Sincerely,

/s/ Randy Thompson
Randy Thompson
Deputy Chief Information Officer
City of Mesa Arizona

/s/ Dale Shaw
Dale Shaw
TRWC Executive Director